

State Notes

TOPICS OF LEGISLATIVE INTEREST

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Gasoline, Cars, and Sales Tax Revenue **By Jay Wortley, Senior Economist**

An average Michigander stopped to purchase some gasoline on his way home from work. He complained to himself about the increasing amount of his income he was spending on gasoline despite the fact that he was trying to cut back on his driving. Work had been particularly busy the past few days, so he thought he would stop and purchase a new golf club he had been wanting, but given the large amount he had just spent on gas, he decided he really couldn't afford the golf club, so he headed right home. He couldn't help but notice that his seven-year-old car was making an unusual sound, so he made a mental note that it was time to take it in for a tune up. His typical pattern was to purchase a new car every six years; however, buying a new vehicle was out of the question at the present time given that his salary had not been keeping up with inflation and his company's business was down from last year, which increased the possibility that he could be laid off.

This scenario demonstrates how ongoing structural and cyclical factors are adversely affecting the level of activity in Michigan's economy and forcing consumers and businesses to adjust how they are spending their income, which is having an impact on sales tax collections. In fact, two factors in particular: 1) the increase in gasoline prices, and 2) the decline in motor vehicle sales, have had and continue to have very noticeable, but very contrasting impacts on sales tax collections. This article discusses the impact that rising gas prices and declining motor vehicle sales are having on sales tax revenue.

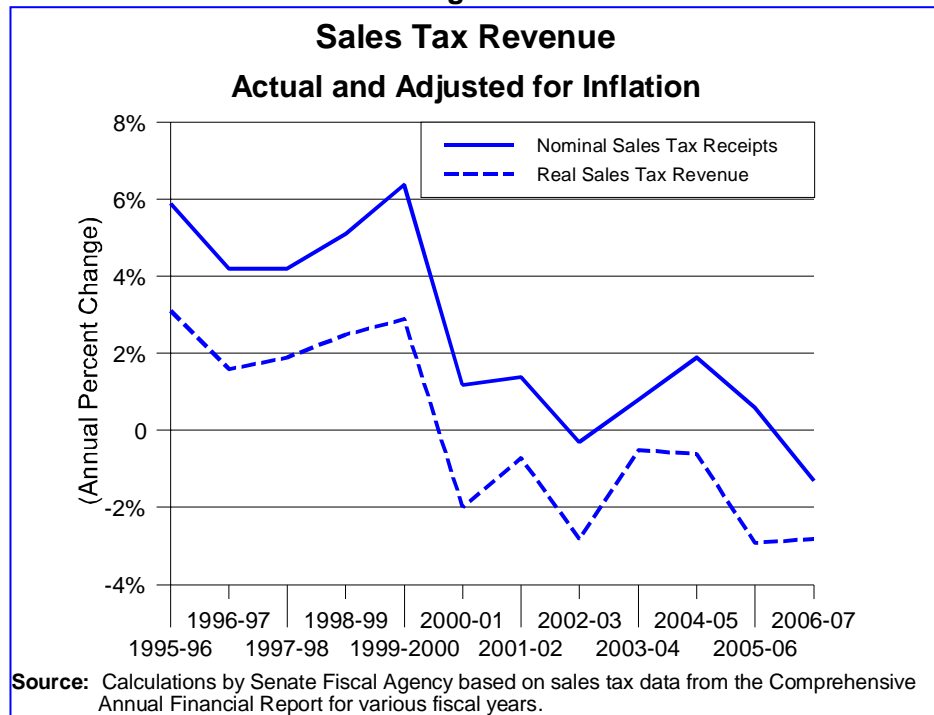
Michigan's Sales Tax

The sales tax is one of Michigan State government's major sources of revenue. In fiscal year (FY) 2006-07, Michigan's 6.0% sales tax generated \$6.55 billion, which accounted for about 15.0% of total State government revenue. Almost three-fourths of the sales tax revenue is earmarked to the School Aid Fund to help finance public K-12 education in Michigan. Sales tax revenue also funds the State's revenue sharing program with local governments. The revenue collected from the sales tax has been very weak in recent years. Figure 1 shows that from FY 1995-96 through FY 1999-2000, when economic activity was relatively robust, sales tax receipts were growing at annual rates of 4.0% to 6.0%. However, with the onset of the economic downturn and the dramatic acceleration in the restructuring and downsizing of the domestic motor vehicle industry beginning in FY 2000-01, the annual growth in sales tax receipts has slowed considerably and even declined in a couple of years. In fact, after adjusting for inflation, sales tax receipts actually have declined for seven consecutive years beginning in FY 2000-01.

This weak growth in nominal sales tax collections and the decline on an inflation-adjusted basis actually represent the net impact not only from the changes consumers and businesses are being forced to make in the overall amount they are spending, but also from adjustments they are making in what they are purchasing. For example, two key factors that are causing consumers to adjust their spending patterns are the increase in gasoline prices and the weak economy, which has reduced consumer confidence and made consumers less likely to purchase motor vehicles.



Figure 1



Sales Tax and Gasoline

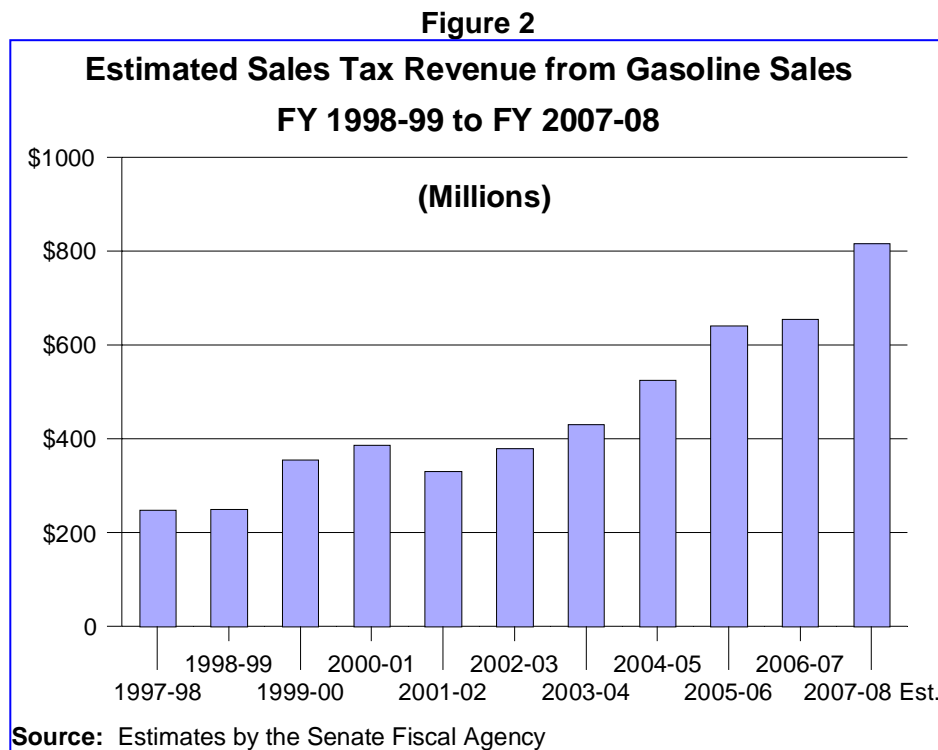
Gasoline prices have increased sharply in recent years and some of the steepest increases have occurred during the past year. In July 2008, the price of a gallon of unleaded regular gasoline averaged \$4.08 in Michigan. This was up 25.2% from the price in March 2008, 30.0% from the price in July 2007, and 86.9% from the price in July 2005.

Michigan assesses a sales tax, in addition to a special excise tax, on gasoline. The sales tax is based on the price of gasoline before factoring in the \$0.19 per gallon State excise tax. Given the sharp increase in the price of gasoline over the past few years combined with the fact that the sales tax rate is 6.0% of the retail price, the amount of sales tax collected on each gallon of gasoline has increased dramatically. In FY 2004-05, the price of gasoline averaged \$2.09 per gallon and the sales tax per gallon totaled 10.7 cents. In sharp contrast, during the first nine months of FY 2007-08, the average price of gasoline was up to \$3.40 per gallon and the sales tax per gallon averaged 18.2 cents. At \$4.00 per gallon, the sales tax on a gallon of gasoline equals 21.6 cents.

The large increase in the price of gasoline has caused consumers to purchase less gas; however, the percentage decline in consumption has not been as large as the percentage increase in the price, so the amount of sales tax being collected from gasoline sales has increased significantly. In FY 2001-02, consumers in Michigan purchased 4.96 billion gallons of gasoline; however, with the rise in the price of gas and the slowdown in Michigan's level of economic activity, gasoline consumption fell to 4.64 billion gallons by FY 2006-07, a decline of 6.3%. During the same time, the price of gas was up almost 100.0%. As a result, there has been a significant increase in the



amount of sales tax collected from gasoline sales, as illustrated in Figure 2. In FY 1998-99, when gasoline sold for about \$1.00 per gallon, gas purchases generated an estimated \$246.4 million in sales tax revenue. In FY 2006-07, the price for gasoline was up to \$2.67 per gallon and gas purchases generated an estimated \$653.2 million in sales tax revenue. During the first nine months of FY 2007-08, sales tax collections from gasoline sales are running ahead of the FY 2006-07 level by 24.9%. At this pace, sales tax collections from gasoline sales will top \$800.0 million in FY 2007-08, which will be up more than \$150.0 million from the FY 2006-07 level.



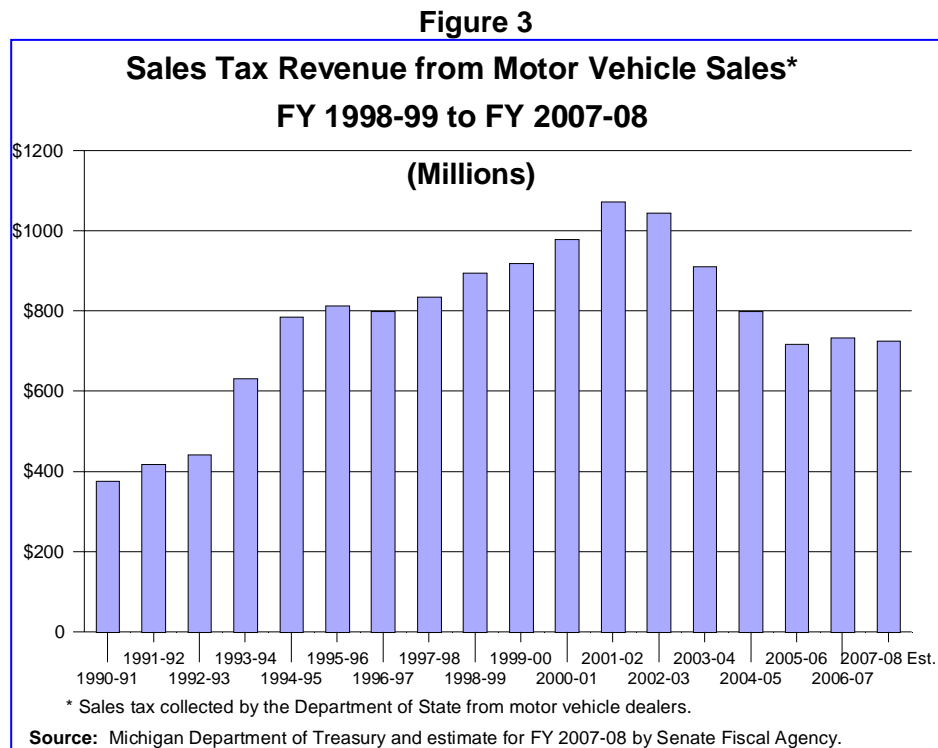
Almost all consumers live on a fixed budget, so when they are forced to spend more on gasoline, they must cut back on their spending in other areas, such as purchases of motor vehicles. That is why total sales tax collections have been very weak lately even though sales tax collections from gasoline sales have been up dramatically.

Sales Tax on Motor Vehicles

When economic conditions deteriorate, real incomes decline and job security decreases. As a result, consumers tend to cut back on their spending and one of the first areas reduced is spending on the relatively more expensive durable goods such as motor vehicles. If people feel less confident about their current and future financial situation, they are less willing to engage in any major multiyear financial commitments. To reduce their spending on motor vehicles, they purchase a less expensive new vehicle than they otherwise would have, purchase a used vehicle instead of a new one, or postpone the purchase of a motor vehicle.



Given the relatively high price for motor vehicles, the ups and downs in motor vehicle sales have a noticeable impact on sales tax collections. Figure 3 shows sales tax revenue collected from new and used motor vehicles purchased from motor vehicle dealers from FY 1990-91 to FY 2006-07. During the strong economic activity that prevailed during the latter half of the 1990s, sales tax collections from motor vehicle transactions increased steadily and remained strong through FY 2001-02. The slowdown in Michigan's economic activity, which began in the early 2000s, was reflected in the motor vehicle sales tax collections beginning in FY 2002-03, and they remain weak up to the present time. In fact, the sales tax collected from motor vehicle sales in FY 2006-07 was less than what was collected in FY 1994-95. This decline in motor vehicle sales tax collections has been very steady. During the 38 months from August 2003 through September 2006, motor vehicle sales tax collections fell below the year-ago level 36 times. After peaking at \$1.07 billion in FY 2001-02, motor vehicle sales tax receipts fell for four consecutive years before posting a modest increase in FY 2006-07. By the end of FY 2006-07, motor vehicle sales tax receipts were down 31.6%, or \$338.7 million, from the FY 2001-02 level. So far in FY 2007-08, motor vehicle sales tax collections are down from the year-ago level by 0.8%.



Conclusion

Sales tax revenue has not experienced much growth in recent years, even though sales tax collections from gasoline sales have been up significantly. Most consumers live on a fixed budget, so as their spending increases in one area, such as gasoline, it has to decline in other areas. One area in which sales tax collections are down significantly in recent years is motor vehicle sales.